

LOUISE SUTER

EDUCATION AND EMPLOYMENT

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| Argonne National Laboratory, Chicago, IL, USA <i>Postdoctoral Researcher</i> | 2013 - present |
| University of Manchester, Manchester, UK <i>Joint Theoretical-Experimental Ph.D.</i> | 2008 - 2012 |
| Thesis Title: <i>A Search for Higgs Bosons in Final States with Multiple Tau Leptons at the DØ experiment</i> Supervisors: Prof. Stefan Söldner-Rembold and Prof. Jeffrey Forshaw | |
| University of Manchester, Manchester, UK <i>MPhys, first class honours</i> | 2004 - 2008 |
| Project 1: <i>High Energy Particles in Interplanetary Space</i> Project 2: <i>Lifetime Measurements of Nanosecond Nuclear States</i> | |

LEADERSHIP EXPERIENCE

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| NOνA Data Quality Convener | Jan 2015 - present |
| NOνA Watchdog Group Leader | Jan 2015 - present |
| NOνA Near Detector Operations Manager | Oct 2014 - present |
| Near Detector Commissioning and Installation Leader | April 2014 - Oct 2014 |

PUBLICATIONS

Co-author of 139 publications of the DØ Collaboration.
Co-author of 2 publications of the LBNE/DUNE Collaboration.

Select publications and proceedings:

L. Suter,
Measurement of Muon Neutrino Disappearance with the NOνA Experiment,
subm. to Proceedings of International Workshop on Neutrino Factories, Super Beams and Beta Beams:
NUFACT (2013).

J. Zalesak *et al.*,
The NOνA Far Detector Data Acquisition System,
[J. Phys. Conf. Ser. **513** \(2014\)](#).

V. M. Abazov *et al.* (DØ Collaboration),
Search for Higgs Boson Production in Trilepton and Like-Charge Electron-Muon Final States with the DØ Detector,
[Phys. Rev. D **88** \(2013\) 5, 052009](#).

T. Aaltonen *et al.* (CDF and DØ Collaborations),
Higgs Boson Studies at the Tevatron,
[Phys. Rev. D **88** \(2013\) 5, 052014](#).

V. M. Abazov *et al.* (DØ Collaboration),

Combined Search for the Higgs Boson with the DØ Experiment,

[Phys. Rev. D **88** \(2013\) 5, 052011.](#)

V.M. Abazov *et al.* (DØ Collaboration),

Search for Doubly-Charged Higgs Boson Pair Production in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV,

[Phys. Rev. Lett. **108**, 02 \(2012\).](#)

L. Suter,

Beyond the Standard Model Higgs Boson Searches in Tau Final States at DØ,

[Nuovo Cim. C **035** \(2012\) 06, 399 \[Frascati Phys. Ser. **57** \(2013\) 399\].](#)

S. Gieseke *et al.*,

HERWIG++ 2.5 Release Note,

[arXiv:1102.1672 \(2011\).](#)

L. Suter,

Combined CDF and DØ Upper Limits on MSSM Higgs Boson Production in $p\bar{p}$ Collisions at the Tevatron,

Proceedings of the 2011 Meeting of the Division of Particles and Fields of the American Physical Society,
[eConf C110809 \(2011\).](#)

L. Suter,

Search for Charged and Doubly-Charged Higgs Boson Production in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV,

Proceedings of the 2011 Meeting of the Division of Particles and Fields of the American Physical Society,
[eConf C110809 \(2011\).](#)

CONFERENCE TALKS AND POSTER PRESENTATIONS

Extrapolation and systematics for Muon Neutrino Disappearance at NOνA (parallel),

Meeting of the DPF of the APS, Ann Arbor, MI, USA, Aug 2015.

NOνA: NuMI Off-Axis Electron Neutrino Appearance (plenary),

48th Annual Fermilab Users' Meeting, Batavia, IL, USA, June 2015.

Far-to-Near Extrapolation for the NOνA Muon Neutrino Disappearance Analysis (poster),

XXVI International Conference on Neutrino Physics and Astrophysics: Neutrino 2014,
Boston, MA, USA, June 2014.

Far-to-Near Extrapolation for the NOνA Muon Neutrino Disappearance Analysis (poster),

47th Annual Fermilab Users' Meeting, Batavia, USA, June 2014.

Muon Neutrino Disappearance at NOνA (plenary),

New Perspectives, Batavia, IL, USA, June 2014.

Measuring ν_μ Disappearance with NOνA (poster)

International Workshop on Neutrino Factories, Super Beams, and Beta Beams,
Beijing, China, Aug. 2013.

BSM Higgs Searches in Tau Final States at DØ (plenary)

Les Rencontres de Physique de la Vallée d'Aoste, La Thuile, Italy, 2012.

Search for the SM Higgs Boson in the $\tau\tau\mu+X$ Final State at DØ (parallel)

IoP Joint HEPP and APP Meeting 2012, Queen Mary, University of London, UK, 2012.

Combined CDF and DØ Upper Limits on MSSM Higgs Boson Production in $p\bar{p}$ Collisions at the Tevatron (parallel)

Meeting of the DPF of the APS, Providence, RI, USA, 2011.

Search for Charged and Doubly-Charged Higgs Boson Production in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV (parallel)

Meeting of the DPF of the APS, Providence, RI, USA, 2011.

SEMINARS AND OTHER SELECTED PRESENTATIONS

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| FNAL NO ν A Operational Readiness Review, <i>Near Detector Status and Maintenance</i> | Oct. 2014 |
| Indiana University HEP Seminar, <i>Searches of Higgs bosons with Tau Leptons</i> | Nov. 2012 |
| Argonne National Lab. HEP Seminar, <i>Searches for Higgs bosons with Tau Leptons</i> | Nov. 2012 |
| University of Manchester Bohr Seminar, <i>Search for SM and BSM Higgs bosons</i> | Nov. 2012 |
| University of Manchester Bohr Seminar, <i>The NMSSM in HERWIG++</i> | Sept. 2009 |

OUTREACH

- Trained guide of the NuMI beam underground area, giving tours of the NO ν A, MINOS, and MINERVA detectors to laboratory visitors, including VIPs visiting the FNAL directorate (2014 - present).
- Elected officer of the FNAL Student and Postdoc Association (2013 - 2014)
Worked with the FNAL Directorate to ensure the quality of life for students and post-docs. This includes organising the New Perspectives conference, which runs alongside the Fermilab Users' Meeting, designed to give young researchers the opportunity to showcase their work. In addition, a visit to Washington, D.C. was organised in collaboration with the Fermilab Users' Executive Committee to meet with more than 350 representatives, senators, and their staff to spread interest and understanding of HEP.
- Volunteer for FNAL's "Meet a Scientist" program, explaining and answering questions about life as a scientist to high school students (2013 - present).
- Organised Joint Argonne National Lab.-FNAL-University of Chicago "Expose Yourself" lecture series at FNAL. This series aims to let graduate and post graduate researchers showcase their work in an interesting location (March 2014).